POWER OF ATTORNEY

THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application

Ruddy et al.

Confirmation No.:

of:

Serial No.:

08/852,495

Art Unit:

1634

Filed:

May 7, 1997

Examiner:

Goldberg, Jeanine

For:

POLYMORPHISMS IN THE REGION OF THE

Attorney Docket No: 8907-057-999

HUMAN HEMOCHROMATOSIS GENE

REVOCATION AND POWER OF ATTORNEY OR AUTHORIZATION OF AGENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Bio-Rad Laboratories, Inc., Assignee, hereby revokes any and all previous powers and appoints:

 \bowtie Practitioners at Customer Number 20583

as its attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please direct all correspondence address for the above-identified application to:

 \boxtimes The above mentioned Customer Number.

 \boxtimes Firm or Individual Name:

Address:

Jones Day, 222 East 41st Street, New York, New York 10017

Telephone:

(212) 326-3939

I am the:

Applicant/Inventor

Assignee of record of the entire interest. See 37 CFR 3.71.

(Statement under 37 CFR 3.73(b) is applicable)

| | SIGNATU | JRE of Applicant or | Assignee of Record |
|-------|---------|---------------------|--|
| Date: | 8-25-04 | Signature: | Antlund |
| | , | Typed Name: | John J. Cassingham |
| | | Position/Title: | Patent Counsel and Assistant Secretary |
| | | Assignee: | Bio-Rad Laboratories, Inc. |

Statement Under 37 C.F.R. 3.73(b)

| Bio-Rad | Laborate | ories, Inc., states that it is: | | | |
|-----------|-------------|---|---|-----------------------------------|---|
| | \boxtimes | the assignee of the entire ri | | | |
| | | an assignee of less than the The extent (by, percentage) | | | % |
| | | The extent (by, percentage) | or its ownership i | merest is | 70 |
| in the pa | tent appl | ication/patent identified abo | ve by virtue of eith | ner: | |
| | \boxtimes | An assignment from the invehich is attached hereto. | ventor(s) of the pat | ent application/ | patent identified above, a copy |
| OR | | A chain of title from the incurrent assignee as shown | | tent application | /patent identified above, to the |
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| | | 2. From: To: The document was recorde at Reel , Fram | | tes Patent and I | |
| | | 3. From: To: The document was recorde at Reel , Fram | | ites Patent and T | |
| | | Additional documents in th | e chain of title are | listed on a supp | plemental sheet. |
| | | | e., the original assisted to Assignment | gnment docume Division in acce | ent or a true copy of the original ordance with 37 CFR Part 3, if |
| | The und | ersigned (whose title is supp | olied below) is autl | norized to act or | n behalf of the assignee. |
| | | ASS | IGNEE: | Bio-Rad | Laboratories, Inc. |
| Date: | | 8-25.04 | Signature: | Shift | Geney |
| | | | Typed Name: | John J. Cassii | ngham |
| | | | Position/Title: | Patent Couns | el and Assistant Secretary |
| | | of all the inventors or assignmultiple forms if more than | | | t or their representative(s) are |
| | l of 1 for | m is submitted. | | | |



JANUARY 13, 19986

TOWNSEND AND TOWNSEND AND CREW LLP RENEE A. FITTS TWO EMBARCADERO CENTER, 8TH FLOOR SAN FRANCISCO, CA 94111-3834

457-60011045

LES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231



8907-057-999

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

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RECORDATION DATE: 11/19/1997

REEL/FRAME: 8813/0560 NUMBER OF PAGES: 2

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

RUDDY, DAVID A.

DOC DATE: 11/11/1997

ASSIGNOR:

WOLFF, ROGER K.

DOC DATE: 11/07/1997

ASSIGNEE:

MERCATOR GENETICS, INC. 4040 CAMPBELL AVENUE MENLO PARK, CALIFORNIA 94025

SERIAL NUMBER: 08852495

PATENT NUMBER:

FILING DATE: 05/07/1997 TI

ISSUE DATE:

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SHIRLIE SIMON, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

| • | | فيستاها فيجيها والأخاص | nario . |
|--|---------------------------------------|---|---|
| <u></u> | 2-03-1997 | 196 | 7 Attorney Docket No. 17957-00011 |
| FÜRM PTO-1595 (Rev. 6-93) | | POVER'SHEET | U.S. DEPARTMENT OF COMMERC Patent and Trademark Office |
| To the Honorable Asst. Communication | 100581245 SIGNET OF PATERIES PROSE | DIG TOE attached original | documents or copy thereof. |
| 1. Name of conveying party(ies | | 2. Name and address o | |
| David A. Ruddy Roger K. Wolff | | <u>ම</u> | receiving party(les): |
| Roger K. Wolff | DEC 1 7 2004 | Mame: Merca | ator Genetics, Inc. |
| Additional name(s) of conveying party(ies | Y | Internal Address: | |
| | | Street Address: 4040 | Campbell Avenue |
| 3. Nature of conveyance: | | | |
| x Assignment | Merger | City: Menlo Park Star | te: CA ZIP: 94025 |
| Security Agreement Other: | Change of Name | | |
| Execution Date: 11/11/97, 1 | 1/7/07 | | • |
| Execution Date. 11/11/97, 1 | 177197 | Additional name(s) & ad | dress(es) attached? Yes X No |
| 4. Application number(s) or pate | | | ruless(es) attached? Yes X No |
| | | | |
| If this document is being filed | together with a new applicati | on, the execution date of | f the application is: |
| A. Patent Application No. | .(s) 08/852,495 | B. Patent No.(s) | |
| | Additional numbers atta | ched? Yes | x No |
| Name and address of party to concerning document should | | 6. Total number of appli | cations and patents involved: 1 |
| Name: Renee A. Fitts TOWNSEND and TOWN Two Embarcadero Cente | SEND and CREW LLP | 7. Total fee (37 CFR 3.4 | \$40.00 |
| San Francisco, California | | Enclosed x | Charge Fees to Deposit Account |
| (650) 326-2400 | | x Charge any additi during the pender overpayment, to | ional fees associated with this paper or ncy of this application, or credit any deposit account |
| | | 8. Deposit account numl | ber: 20-1430 |
| | | | |
| | DO NOT US | E THIS SPACE | 2495 |
| 9. Statement and signature. | | | 880 |
| To the best of my knowledge of the original document. | and belief, the foregoing info | rmation is true and correc | ct and any attached copy iea true copy |
| Renee A. Fitts | _ Kener Q. 1 | Uth | , |
| Name of Person Signing | Signature | / | Date # |
| Atty. Reg. No. <u>35,136</u> | Total number of pa | ages including cover shee | t, attachments, and documents |
| 10. Change Correspondence Add | | es No | 46.000 |
| OMB No. 0651-0011 (exp. 4/94 |) | | TI X |
| Mail documents to be recorded with required | cover sheet information to: | ach this portion | E |
| | Asst. Commis Box As | sioner for Patents ssignments n, D.C. 20231 | |
| | | | 12/05 01 FO |
| | | | 40 |

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, David A. Ruddy of 885 Greenwich Street, San Francisco, CA 94133, and Roger K. Wolff of 41 Eugene Street, Mill Valley, CA 94941, hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below identified application for United States Letters Patent:

| Title of the Invention: Polymorph | nisms in the Human Hemochromatosis Gene | |
|--|---|---|
| Filing date: <u>May 7, 1997</u> | Application No.: <u>08/852,495</u> | ; and |
| CA 94023, hereinanter referred to a | a California corporation, located at 4040 Campbell Ave s "Assignee," is desirous of acquiring an interest in and Registrations which may be granted on the same; | nue, Menlo Park, the invention and |
| Assignors have assigned, and by thes invention and application and to all for and in and to any Letters Patent and Regiand all countries throughout the world Convention. The right, title and interest assigns as fully and exclusively as it wou made, for the full term of any Letters Patenewal, continuation in whole or in patenewal, continuation in whole or in patenewal, and any improvements, (b) expatent applications and instruments of trees. | le consideration, receipt of which is hereby acknowledge presents do assign to Assignee all right, title and integer counterparts (including patent, utility model and instrations which may hereafter be granted on the same in I, and to claim the priority from the application as provest is to be held and enjoyed by Assignee and Assignee and held and enjoyed by Assigners had this assignet and Registrations which may be granted thereon, of art, substitution, conversion, reissue, prolongation or extended the will, without charge to Assignee, but at Association of U.S. Patent applications and foreign confecute, verify, acknowledge and deliver all such further transfer and (c) perform such other acts as Assignee law Registrations for the invention and improvements in any Assignee's successors and assigns. | erest in and to the industrial designs), the United States wided by the Parise's successors and signment not been or of any division, attension thereof. signee's expense, unterparts on the papers, including fully may request |
| IN TESTIMONY W | HEREOF, Assignors have signed their names on the de | ates indicated. |
| Date:11/11/97 | () and s | / |
| Date: 11 7 7 | David A. Ruddy () | |
| | Roger K. Wolff | |

ASSIGN.MRG 9/96

H:\HOME\RAF\WORK\17957\110\ASSIGN.

MAY 04, 1999 PENNIE & EDMONDS BRIAN M. POISSANT

1155 AVENUE OF THE AMERICAS

NEW YORK, NY 10036

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JES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231



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RECORDATION DATE: 01/29/1999

REEL/FRAME: 9739/0165

NUMBER OF PAGES: 2

BRIEF: ASSIGNMENT OF ASSIGNOR''S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

MERCATOR GENETICS, INC. DOC DATE: 01/27/1999

ASSIGNEE:

PROGENITOR, INC. 4040 CAMPBELL AVENUE MENLO PARK, CALIFORNIA 94025

SERIAL NUMBER: 08852495

PATENT NUMBER:

FILING DATE: 05/07/1997

ISSUE DATE:

MAURICE CARTER, EXAMINER ASSIGNMENT DIVISION OPFICE OF PUBLIC RECORDS

REFERRED TO_ REC'D

MAY 1 3 1999

Pennie & Edmonds O.K. for filing

ASSIGNMENT

WHEREAS, Mercator Genetics, Inc., ASSIGNOR, a corporation organized and existing under the laws of California, U.S.A., and having a place of business at 4040 Campbell Avenue, Menlo Park, CA 94025, is the owner of the entire right, title and interest in, and to, application for United States Letters Patent, in the names of David A. Ruddy and Roger K. Wolff for Polymorphisms in the Region of the Human Hemochromatosis Gene; and of the invention therein described; and

- which is identified by Pennie & Edmonds LLP docket no. 8907-0057-999
- which was filed on May 7, 1997 as Application No. 08/852,495

and WHEREAS, Progenitor, Inc., ASSIGNEE, a corporation organized and existing under the laws of Delaware, U.S.A., and having a place of business at 4040 Campbell Avenue, Menlo Park, CA 94025, is desirous of obtaining the entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, I, the said ASSIGNOR, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

AND I HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND I HEREBY covenant and agree that I have full right to convey the entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I HEREBY further covenant and agree that I will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

| IN TESTIMONY WHEREOF, I hereunto s | et my hand and seal this 27 day of January, 1999 |
|--|--|
| | Mercator Genetics, Inc. |
| a Parkeria | By: Douglass B. Given, President |
| State of California) SS.: County of Sark Clare) | |
| County of Sarka Clare) | • |
| On this 27th day of January | , 1999, before me, a Notary Public in and for the State and County |
| aforesaid, personally appeared Douglas | of that name, who signed and sealed the foregoing instrument, and he |
| acknowledged the same to be his free act and deed. | and the state of t |
| | |
| SUSAN J. KEYSER O | Susan & Lugse |
| Comm. # 1060531 | Notary Public |
| San Mateo County | |



RECORDATION FORM COVER SHEET

PATENTS ONI V

02-08-1999

Attorney Docket Number 8907-057-999

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| MLD 1-29-99 Please rec. 100 | 1961528 Inginial accuments or copy thereof. |
|--|--|
| Name of conveying party(ies): | 2. Name and address of receiving party(ies): |
| Mercator Genetics, Inc. | Name: Progenitor, Inc. |
| Additional name(s) of conveying party(ies) attached? □ Yes 🛮 No | Address: 4040 Campbell Avenue |
| 3. Nature of conveyance: | Menlo Park, CA 94025 |
| ■ Assignment | Country (if other than USA): |
| □ Security Agreement □ Change of Name | |
| □ Other | |
| Execution Date: January 27, 1999 | |
| 4. Application number(s) or patent number(s): | |
| If this document is being filed together with a new application, the execu | ution date of the application is: |
| A. Patent Application No.(s) <u>08/852.495</u> | B. Patent No.(s) |
| Additional number | s attached? □ Yes ⊠ No |
| Name and address of party to whom correspondence concerning document should be mailed: | 6. Number of applications and patents involved: 1 |
| PENNIE & EDMONDS LLP 1155 Avenue of the Americas New York, NY 10036 | 7. Total fee (37 CFR 3.41):\$ 40.00 Please charge to the deposit account listed in Section 8. |
| /0\$/1999 JSHABAZZ 00000010 161150 08852495 | 8. Deposit account number: 16-1150 |
| FC:581 40.00 CH | |
| DO NOT U | SE THIS SPACE |
| 9. Statement and signature. | |
| | ning information is true and correct and any attached copy |
| Brian M. Poissant, Reg. No. 28,462 | M. Porssant Rog. No. 35,750 Junay 29, 1999 |
| Name of Person Signing Reg. No. Signature | otal number of pages including cover sheet: 2 |
| <u> </u> | otal number of pages including cover sheet: 2 |

Mail documents to be recorded with required cover sheet information to:

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Washington, D.C. 20231





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UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

MAY 08, 2000

PENNIE & EDMONDS LEED BRIAN M. POISSANT 1155 AVENUE OF THE AMERICAS NEW YORK, NY 10036

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RECORDATION DATE: 02/04/2000

REEL/FRAME: 010598/0014

NUMBER OF PAGES: 3

ASSIGNMENT OF ASSIGNOR''S INTEREST (SEE DOCUMENT FOR DETAILS). BRIEF:

ASSIGNOR:

PROGENITOR, INC.

DOC DATE: 03/24/1999

ASSIGNEE:

BIO-RAD LABORATORIES, INC. 1000 ALFRED NOBEL DRIVE HERCULES, CALIFORNIA 94547

SERIAL NUMBER: 09497957 €767

PATENT NUMBER:

SERIAL NUMBER: 08436074

8907-046

PATENT NUMBER: 5753438

SERIAL NUMBER: 08599252

ISSUE DATE: 05/19/1998

FILING DATE: 02/09/1996

1904-049

ISSUE DATE: 01/06/1998

FILING DATE: 02/04/2000

FILING DATE: 05/08/1995

PATENT NUMBER: 5705343

8909-051 SERIAL NUMBER: 08632673

FILING DATE: 04/16/1996 ISSUE DATE: 01/27/1998

PATENT NUMBER: 5712098

RECEIVED PENNIE & EDMONDS

ISSUE DATE:

MAY 2 4 2000 NAM - 27

REFERRED TO KINDLA I MY CELL DE REC'D

MAY 2 2 2000

Pennie & Edmonds O.K. for filling

010598/0014 PAGE 2

SERIAL NUMBER: 08652265 8901-053 PATENT NUMBER: 6025130

SERIAL NUMBER: 08724394 8409-054 PATENT NUMBER: 5872237

SERIAL NUMBER: 08834497 8407-056

PATENT NUMBER:

SERTAL NUMBER: 08852495 7991-067

PATENT NUMBER:

Ox1876.010 SERIAL NUMBER: 08867010 PATENT NUMBER:

SERIAL NUMBER: 08920559 8907-062

PATENT NUMBER:

SERIAL NUMBER: 09094964 \$907-074

PATENT NUMBER:

SERIAL NUMBER: 09216077 - 8907-046

PATENT NUMBER:

FILING DATE: 05/23/1996

ISSUE DATE: 02/15/2000

FILING DATE: 10/01/1996 ISSUE DATE: 02/16/1999

FILING DATE: 04/04/1997 V

ISSUE DATE:

FILING DATE: 05/07/1997

ISSUE DATE:

FILING DATE: 06/02/1997/

ISSUE DATE:

FILING DATE: 08/27/1997

ISSUE DATE:

FILING DATE: 06/12/1998 √

ISSUE DATE:

FILING DATE: 12/18/1998,/

ISSUE DATE:

SHARON LATIMER, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231



AUTHORIZATION TO CHARGE ADDITIONAL TO DEPOSIT ACCOUNT

MAY 08, 2000

TO:

OFFICE OF FINANCE

FROM:

ASSIGNMENT DIVISION

OFFICE OF PUBLIC RECORDS

SUBJECT:

DEPOSIT ACCOUNT CHARGE(S)

CHARGE THE DEPOSIT ACCOUNT LISTED BELOW ADDITIONAL FEE(S) AS INDICATED BELOW. AUTHORIZATION TO CHARGE ADDITIONAL FEES HAS BEEN PROVIDED PER THE ATTACHED COVER SHEET, OR BY DIRECT CONTACT WITH THE CUSTOMER.

DEPOSIT ACCOUNT NUMBER: 116115

PROPERTY NUMBER: 09497957

RECORDING FEES:

FEE CODE: 581

AMOUNT: 40

IF YOU HAVE ANY QUESTIONS REGARDING THIS NOTICE, YOU MAY CONTACT THE INDIVIDUAL WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723.

581

SHARON LATIMER, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

| TRADEMARK SERVICE FEES: | FEE | CODE: |
|---|------------|-------|
| RECORDING FIRST MARK RECORDATION SECOND AND | 481 482 | |
| SUBSEQUENT MARK IN SAME DOCUMENT LABOR CHARGES FOR SERVICES PER HOURS OR FRACTION THEREOF | 484 | |
| UNSPECIFIED OTHER SERVICES | 485 | |

PATENT SERVICE FEES:

RECORDING EACH PATENT ASSIGNMENT,

AGREEMENT, OTHER PAPER, PER PROPERTY
LABOR CHARGES FOR SERVICES PER HOUR
(\$30) OR FRACTION THEREOF
UNSPECIFIED OTHER SERVICES
585

successors and assigns, to obtain and enforce proper patent protection for the invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by BIO-RAD, its successors and assigns.

IN WITNESS WHEREOF, each party has caused its authorized representative to execute this Assignment.

PROGENITOR, INC.

Name: Mark Bagikall

Title: Vice President and Chief Financial Officer Date: _____

101287450

ass Mail No. <u>EL 236 253 072 US</u>

Attorney Docket Numbers

5

; 8907-049-999; 8907-052-999; 8907-053-999:);8907-056-999; 8907-057-999; 8907-059-999;

8907-062-999; 8907-074-999; 8907-076-999

TO THE HONORABLE COMMISSIONER OF PATENTS AND TRADEMARKS

Box Assignment Washington, DC 20231

| Treast record the attacked original | documents or copy thereof. |
|---|--|
| Name of conveying party(ies): | 2. Name and address of receiving party(ies): |
| Progenitor, Inc. | Name: Bio-Rad Laboratories, Inc. |
| Additional name(s) of conveying party(ies) attached? ☐ Yes ☑ No | Address: 1000 Alfred Nobel Drive |
| 3. Nature of conveyance: | Hercules, CA 94547 |
| ■ Assignment □ Merger | Country (if other than USA): |
| □ Security Agreement □ Change of Name | |
| O Other | |
| Execution Date: March 24, 1999 | |
| 4. Application number(s) or patent number(s): | |
| If this document is being filed together with a new application, the execution de | ate of the application is: |
| A. Patent Application No.(s) | B. Patent No.(s) |
| | |
| 08/436,074 (now US 5,753,438); 08/599,252 (now US | |
| 5,705,343); 08/632,673 (now US 5,712,098); 08/652,265, | |
| 08/724,394 (now US 5,872,237); 08/834,497; 08/852,495; | |
| 08/867,010; 08/920,559; 09/094,964; 09/216,077 | |
| Additional numbers attach | ed?□Yes ⊠No |
| 5. Name and address of party to whom correspondence | 6. Number of applications |
| concerning document should be mailed: | and patents involved: 11 |
| PENNIE & EDMONDS LLP | 7. Total fee (37 CFR 3.41):\$ 440.00 |
| 1155 Avenue of the Americas | Please charge to the deposit account listed |
| New York, NY 10036 | Section 8. |
| | 8. Deposit account number: |
| ODO DHGUYEN 00000143 161150 09497957 | 16-1150 |
| A 40.00 CH DO NOT LISE T | HIS SPACE |
| 68 40.00 CH DO NOT USE T | |

Signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy

Total number of pages including cover sheet:

is a true copy of the original document.

Reg. No.

Brian M. Poissant Name of Person Signing

ASSIGNMENT

WHEREAS, Progenitor, Inc., a Delaware corporation having offices at 4040 Campbell Avenue, Menlo Park, California 94025 ("PROGENITOR"), owns, by assignment, all right, title, and interest in those patents and patent applications set forth on Exhibit A hereto and all inventions claimed therein (the "PROGENITOR PATENTS"); and Bio-Rad Laboratories, Inc., a Delaware corporation having offices at Corporate Offices, 1000 Alfred Nobel Drive, Hercules, California 94547 ("BIO-RAD"), desires to acquire PROGENITOR's entire right, title, and interest in and to the PROGENITOR PATENTS.

NOW THEREFORE, be it known that, in consideration of one dollar (\$1.00) and other good and valuable consideration, receipt of which is hereby acknowledged, PROGENITOR hereby sells, assigns, transfers, and sets over to BIO-RAD, its lawful successors and assigns, PROGENITOR's entire right, title, and interest in and to the PROGENITOR PATENTS and all inventions disclosed therein, and all letters patent of the United States that may be granted thereon, and all reissues, reexaminations, and extensions thereof; and all rights to claim priority on the basis of all such patents and patent applications, and all applications for letters patent claiming priority from the PROGENITOR PATENTS that have been or may be filed in any foreign country and all such letters patent that may be granted thereon in any foreign country, and all extensions, renewals, and reissues thereof; and PROGENITOR hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all letters patent for this invention to BIO-RAD, its successors and assigns, in accordance with the terms of this Assignment;

AND, PROGENITOR HEREBY further covenants that PROGENITOR has the full right to convey the interest assigned by this Assignment, PROGENITOR will take all action and execute all documents necessary to perfect the interest assigned hereby, and PROGENITOR has not executed and will not execute any agreement in conflict with this Assignment;

AND, PROGENITOR HEREBY further covenants and agrees that PROGENITOR, through its officers and employees, will, without further consideration, communicate with BIO-RAD, its successors and assigns, any facts known to PROGENITOR and its officers and employees respecting the invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver all papers that may be necessary or desirable to perfect the title to the invention in said BIO-RAD, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths, and generally do everything possible to aid BIO-RAD, its





MARCH 31, 2000

PENNIE & EDMONDS LLP BRIAN M. POISSANT 1155 AVENUE OF THE AMERICAS NY, NY 10036

UNITED STAIES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231



UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 01/06/2000

REEL/FRAME: 010489/0178

NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

PROGENITOR, INC.

DOC DATE: 03/24/1999

ASSIGNEE:

BIO-RAD LABORATORIES, INC. 1000 ALFRED NOBEL DRIVE HERCULES, CALIFORNIA 94547

SERIAL NUMBER: 08436074 8 907-046

PATENT NUMBER: 5753438 J

SERIAL NUMBER: 08599252

PATENT NUMBER: 5705343~

SERIAL NUMBER: 08632673 8901-052

PATENT NUMBER: 5712098

SERIAL NUMBER: 08652265 × 890 7.050?

FILING DATE: 05/08/1995 ISSUE DATE: 05/19/1998

FILING DATE: 02/09/1996 ISSUE DATE: 01/06/1998

FILING DATE: 04/16/1996 ISSUE DATE: 01/27/1998

FILING DATE: 05/23/1996 ISSUE DATE: 02/15/2000

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SERIAL NUMBER: 08724394-8907-05449

PATENT NUMBER: 5872237/

SERIAL NUMBER: 08834497 990 056 999

PATENT NUMBER:

SERIAL NUMBER: 08852495 J 9907-057949

PATENT NUMBER:

SERIAL NUMBER: 08867010 / 9907-059999

SERIAL NUMBER: 08920559 8907-068 9997 PATENT NUMBER:

SERIAL NUMBER: 09094964 V 000-001-999 PATENT NUMBER:

SERIAL NUMBER: 092160746707-076-0717.
PATENT NUMBER:

FILING DATE: 10/01/1996 ISSUE DATE: 02/16/1999

FILING DATE: 04/04/1997

ISSUE DATE:

FILING DATE: 05/07/1997

ISSUE DATE:

FILING DATE: 06/02/1997

ISSUE DATE:

FILING DATE: 08/27/1997

ISSUE DATE:

FILING DATE: 06/12/1998

ISSUE DATE:

FILING DATE: 12/18/1998

ISSUE DATE:

KIMBERLY WHITE, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

Attorney Docket Numbers , 8907-046-999; 8907-049-999; 8907-052-999; 8907-053-999; 8907-054-999;8907-056-999; 8907-057-999; 8907-059-999 8907-662-999; 8907-074-999; 8002-076-999 TO THE HONORABLE COMMISSIONER OF PATENTS AND TRADEMARKS Box Assignment Washington, DC 20231 Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies): 1. Name of conveying party(ies): Name: Bio-Rad Laboratories, Inc. Progenitor, Inc. Address: 1000 Alfred Nobel Drive Additional name(s) of conveying party(ies) attached? ☐ Yes 🛛 No Hercules, CA 94547 3. Nature of conveyance: Country (if other than USA): □ Merger ■ Assignment ☐ Change of Name □ Security Agreement □ Other _ Execution Date: March 24, 1999 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: B. Patent No.(s) _____ A. Patent Application No.(s) 08/436,074 (now US 5,753,438); \(\sqrt{08/599,252} \) (now US 5,705,343); 08/632,673 (now US 5,712,098); 08/652,265, 08/724,394 (now US 5,872,237); 08/834,497; 08/852,495; 08/867,010; 08/920,559; 09/094,964; 09/216,077 6. Number of applications 5. Name and address of party to whom correspondence and patents involved: ___11___ concerning document should be mailed: 7. Total fee (37 CFR 3.41):....\$ 440.00 PENNIE & EDMONDS LLP Please charge to the deposit account listed in 1155 Avenue of the Americas Section 8. New York, NY 10036 8. Deposit account number: <u>16-1150</u> 01/14/2000 DNGUYEN 00000103 161150 08436074 DO NOT USE THIS SPACE 440.00 CH 01 Fd:581 9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Brian M. Poissant Name of Person Signing Reg. No.

Total number of pages including cover sheet:

ASSIGNMENT

WHEREAS, Progenitor, Inc., a Delaware corporation having offices at 4040 Campbell Avenue, Menlo Park, California 94025 ("PROGENITOR"), owns, by assignment, all right, title, and interest in those patents and patent applications set forth on Exhibit A hereto and all inventions claimed therein (the "PROGENITOR PATENTS"); and Bio-Rad Laboratories, Inc., a Delaware corporation having offices at Corporate Offices, 1000 Alfred Nobel Drive, Hercules, California 94547 ("BIO-RAD"), desires to acquire PROGENITOR's entire right, title, and interest in and to the PROGENITOR PATENTS.

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successors and assigns, to obtain and enforce proper patent protection for the invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by BIO-RAD, its successors and assigns.

IN WITNESS WHEREOF, each party has caused its authorized representative to execute this Assignment.

PROGENITOR, INC.

Name: Mark Bagga

Title: Vice President and Chief Financial Officer

Date: 3/24/99

EXHIBIT A TO

ASSIGNMENT BETWEEN PROGENITOR, INC. AND BIO-RAD LABORATORIES, INC.

| | · | | | | | | of O | DouglASS GIVEN | TRO65WITGR, INC 7/21/00 | | |
|-------------------------|---|---|---|---------------------------------|--|---------------------------------|--|--|--|--|---|
| AND PATENT APPLICATIONS | <u>Title</u> Method to Diagnose Hereditary Hemochromatosis | Method to Diagnose Hereditary Hemochromatosis | Hereditary Hemochromatosis Diagnostic Markers and Diagnostic Methods | Hereditary Hemochromatosis Gene | Megabase Transcript Map: Novel Sequences and Antibodies Thereto | Hereditary Hemochromatosis Gene | Polymorphisms in the Region of the Human Hemochromatosis Gene | Methods and Compositions for Diagnosis and Treatment of Iron Overload Diseases | Methods and Compositions for Diagnosis and Treatment of Iron Misregulation Diseases | Methods and Compositions for Diagnosis and Treatment of Iron Overload Diseases and Iron Deficiency Diseases | Peptides and Peptide Analogues Designed from HFE Protein and Their Uses in the Treatment of Iron Overload Disease |
| PATENT | Filed 05/08/95 | 02/09/96 | 04/16/96 | 05/23/96 | 10/01/96 | 04/04/97 | 05/07/97 | 06/13/97 | 08/27/97 | 06/12/98 | 12/18/98 |
| U.S. PATENTS AND | Serial No. 08/436,074 | 08/599,252 | 08/632,673 | 08/652,265 | 08/724,394 | 08/834,497 | 08/852,495 | 68 (876,010 08,867,010 | 08/920,559 | 09/094,964 | 09/216,077 |
| I. U.S. PA | <u>Inventor</u> Drayna et al. | Drayna et al. | Tsuchihashi et al. | mas et al. | Feder et al. | Thomas et al. | Ruddy and Wolff 08/852, | (Feder et al. | Feder et al. | Foder et al. | Feder et al. |

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| Country | Application No. | Filed |
|--------------|-----------------|----------|
| Canada | 2,220,293 | 96/80/50 |
| Australia | 58559/96 | 96/80/50 |
| South Africa | 96/3639 | 96/80/50 |
| EPO | 96920167.2 | 96/80/50 |
| T) | PCT/US96/06583 | 05/08/95 |
| South Africa | 97/6370 | 03/19/97 |
| South Africa | 97/8804 | 10/01/97 |
| PCT | PCT/US97/17658 | 26/30/60 |
| Canada | | 04/04/97 |
| Australia | 26701/97 | 04/04/97 |
| EPO | 97918642.6 | 04/04/97 |
| Ļ | PCT/US97/06254 | 04/04/97 |
| PCT | PCT/US98/12436 | 06/12/98 |
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